**Section 08 34 85**

**STATIC DRAFT smoke curtains**

**PART 1 - General**

## Summary

### Section Includes: Fire protective smoke containment curtain system designed to provide a tight-fitting, smoke- and draft-control assembly as well as fire protection.

### Products Supplied But Not Installed Under This Section:

#### Group Control Panel unit.

#### Emergency Up Buttons

### Related Sections:

#### 09 2200−Non-Load Bearing Wall Framing: Metal backing in housing mounting area.

#### 09 9100−Paints: Field painting of specified components; repainting of existing field painted elevator door frames.

#### 28 3000−Detection and Alarm: Provision of smoke detectors.

#### Division 26 Sections for 120VAC and control circuit power including conduit, boxes, conductors, wiring devices, and emergency power.

#### 08 3100 Access Panels

## References

### ASTM E84-10 test report with calculated smoke development (CSD) of 2 and a smoke developed index (SDI) of 0 and a calculated flame spread (CFS) of 0.

### NFPA Codes and Standards:

#### 105 − Recommended Practice for the Installation of Smoke-Control Door Assemblies.

#### ASTM – E84 Test report with Calculated Smoke Developed (CSD) of 2 and a Smoke Developed Index (SDI) of 0 and a Calculated Flame Spread (CFS) of 0.

### UL Minimum Performance Standards

#### UL 10B Fire test for door assemblies

#### UL10C Positive pressure fire test for door assemblies

#### UL 10D- Fire test for protective curtains

#### UL Oversized Certificate

#### UL 1784 − Air Leakage Tests for Door Assemblies.

#### Impact test required by independent testing laboratory

#### UL follow up service report required

### California Department of Forestry and Fire Protection and Office of the State Fire Marshal Listing

## Submittals

### Product Data: For each type of product

#### Shop Drawings: Show fabrication and installation details for automatic smoke curtains. Include plans, sections details, attachments to other work and the following:

##### Operating clearances

##### Requirements for supporting fixed draft smoke curtains, track, equipment.

#### Quality Assurance/Control Submittals:

##### Certifications: Copy of specified items.

##### Manufacturer’s installation instructions and testing procedures

## Closeout Submittals

### Comply Section 01 7700−Closeout Submittals; submit following items:

#### Operation and Maintenance Manual

#### Manufacturer’s Warranties

## Quality Assurance

### Overall Standards:

#### Manufacturer shall maintain a quality control program in accordance with ICC-ES Acceptance Criteria.

#### UL follow up Service Report

#### Product must bear a UL label. “Tested in accordance to” standard not acceptable for fire rated smoke curtains. Intertek label not acceptable.

### Qualifications:

#### Manufacturer Qualifications: Minimum five years experience in producing smoke containment systems of the type specified.

#### Installer Qualifications: Factory trained by manufacturer.

### Certifications:

#### Impact test report by independent laboratory

#### California Department of Forestry and Fire Protection and Office of the State Fire Marshal Listing.

#### UL 10B Fire test of door assemblies time temperature curve (no hose stream)

#### UL 10C Positive Pressure fire test for door assemblies time temperature curve (no hose stream)

#### UL Testing Laboratory Label.

#### UL 1784 UL Labeled, listed, classified, certified and marked Smoke & Draft assembly with no more than an air leakage of 3.CFM

#### UL Oversized certificate labeled, listed, classified, certified and marked

#### UL-10D One Hour Fire Protective Curtain Listing Label.

### Pre-Installation Meeting:

#### Schedule and convene a pre-installation meeting prior to commencement of field operations with representatives of the following in attendance: Owner, Architect, General Contractor, smoke containment system sub-contractor, painting sub-contractor, and electrical sub-contractor.

#### Review substrate conditions, requirements of related work, installation instructions, storage and handling procedures, and protection measures.

#### Keep minutes of meeting including responsibilities of various parties and deviations from specifications and installation instructions.

## Delivery, Storage, and Handling

### Reference Section 01 6600−Product Storage and Handling Requirements.

### Follow manufacturer’s instructions.

## Warranty

### Provide manufacturer’s standard one-year warranty.

# Products

## Manufacturer

### Model DSI S1HR Smoke and Fire Curtain

### Manufacturer:

#### DSI Smoke and Fire Curtains

#### [www.doorsysinc.com](http://www.doorsysinc.com) 866-534-3667

### Label each smoke containment system with following information:

#### Manufacturer’s name.

#### Maximum leakage rating at specified pressure and temperature conditions.

#### Label of quality control agency.

## Performance Requirements

### Air Leakage: Not to exceed 3 cfm (0.001416 m3/s) per sf of door opening.

### Fire Rating: UL-10D The enclosure shall be rated at the same rating as the curtain fabric.

## Components

### A weighted bottom bar shall be provided to prevent deflection and ensure the fabric stays tight and fixed.

### The fabric curtain shall be woven VG455 glass fiber fabric. The curtain shall have a nominal weight of no less than 455g/square meter and shall be UL listed for one hour.

# Execution

## Examination

### Examine substrates upon which work will be installed.

#### Verify related work performed under other sections is complete and in accordance with Shop Drawings.

#### Verify wall surfaces and elevator door frames are acceptable for installation of smoke containment system components.

## INSTALLATION

### Install smoke containment system components in accordance with manufacturer’s installation instructions.

## Demonstration

### Qualified Door Systems, Inc Inspector assesses unit(s) after exposure to a fire event.

End of Section 08 34 85